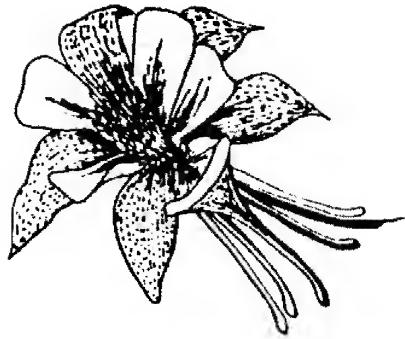


# Aquilegia

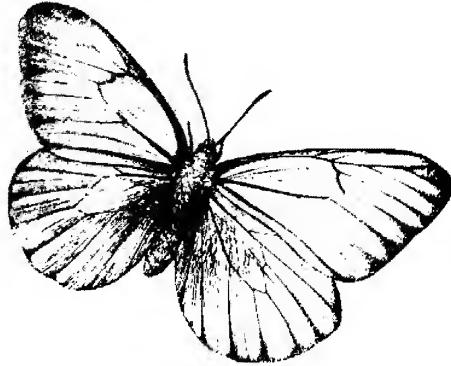


Newsletter of the Colorado Native Plant Society

"... dedicated to the appreciation and conservation of the Colorado native flora"

Volume 11, Number 3

May 1987



## NATURAL HISTORY WORKSHOPS

Pikes Peak Research Station, the newest addition to the Colorado Outdoor Education Center at Florissant, will be sponsoring workshops in Colorado natural history. These workshops are especially designed for teachers, interpreters, naturalists, and all those who enjoy the out of doors. Graduate credit is available.

The 1987 workshops include: Biology of Butterflies - June 19-25; Plant Ecology and Evolution - July 5-10; and Rocky Mountain Natural History: An Integrated Approach to Ecology and Geology - August 9-14.

For more information, contact Dr. Boyce Drummond, Director, Pikes Peak Research Station, Florissant, CO 80816, 689-2025.

## BOARD MINUTES

The CONPS Board of Directors met March 7 at the home of Jim Borland in Denver. Motions were passed to spend up to \$200.00 to provide tables for the Foothills Nature Center where many CONPS workshops are held. The Board also voted to donate \$50.00 each to the Colorado Environmental Lobby and the Colorado Environmental Coalition. Various committee and chapter reports were also discussed.

Steve OKane reported that all of the plant abstracts/summaries for the Rare Plant Monograph have been written and are now being condensed for final editing.

## CALENDAR

- June 12-14 - Grand Valley Field Trip: Jim Borland and Joann Young
- June 27 - Florissant Field Trip: Mary Edwards
- June 28 - Northern Rampart Range Field Trip: Dave Powell and Dr. Neal Osborn
- July 11 - Holy Cross Field Trip: Steve Dougherty
- July 17-19 - North Park and the Park Range Field Trip: Dieter Wilkin and Sue Galatowitsch

## SECOND ANNUAL CRESTED BUTTE WILDFLOWER FESTIVAL

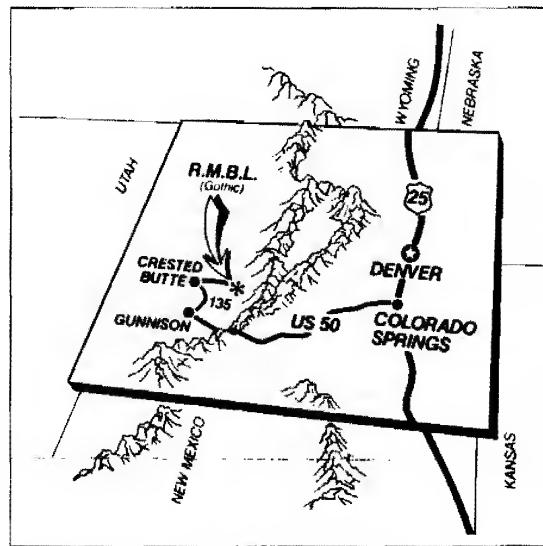
The Second Annual Crested Butte Wildflower Festival has been scheduled for the weekend of July 11, 12, and 13, 1987. Events planned for this year's festival include a Rocky Mountain Wildflower Workshop conducted by members of the Rocky Mountain Biological Laboratory (RMBL) research and teaching staff. These sessions will address identification of wildflower species with follow-up on short hikes into the surrounding mountains. A photographic workshop is also planned and will be conducted by noted Colorado nature photographer John Fielder.

An instructional program will be conducted on the planting of mountain wildflowers and methods of landscaping with plants native to the mountain region. This program will be conducted by Jim Borland, Plant Propagator at the Denver Botanic Gardens and will include a tour of local gardens and yards.

Local artists and galleries in Crested Butte will feature arts and crafts representative of Colorado wildflowers. A wildflower golf

tournament will allow golfers to view the flowers while playing the Skyland Resort golf course. Guided horseback rides and a guided hike sponsored by the West Elk Chapter of the Colorado Mountain Club will also be available to festival participants.

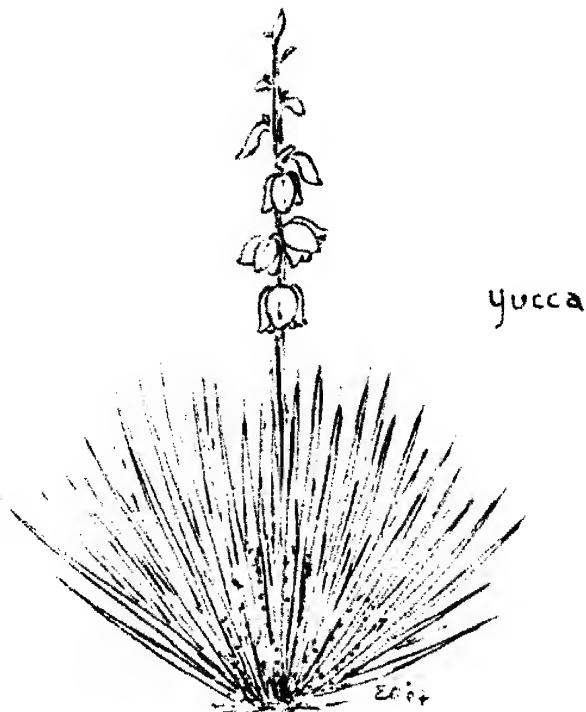
For more information and to receive a complete program, contact the Crested Butte-Mt. Crested Butte Chamber of Commerce, P.O. Box 1288, Crested Butte, CO 81224-1288, 349-6438.



## **SOUTHWESTERN NATIVE PLANTS SYMPOSIUM**

The Native Plant Society of New Mexico is hosting this year's Southwestern Native Plants Symposium at the University of New Mexico in Albuquerque from June 18 through 19. Topics to be covered include: conservation, landscaping, propagation, ethnobotany, and economic and commercial uses. Participants will range from scientists and scholars to horticultural professionals and interested amateurs.

For more information, write Southwest Native Plants Symposium, NPS-NM, P.O. Box 934, Los Lunas, New Mexico 87031 or call Lisa Johnston at 505-865-5608.



## COLORADO NATIVE PLANT SOCIETY FIELD TRIP POLICIES

The Society wishes to remind field trip participants of the guidelines for participation in Society trips. By joining a CONPS field trip you indicate acceptance of these policies.

1. Plant collecting is forbidden on CONPS field trips, with two exceptions:

(1) Collecting is permissible for scientific study (with the appropriate collecting permit, if one is required for the area in question). "Scientific study" means, for the purposes of this policy, study by a trained botanical scientist with an expectation that the study results will lead to published information; collected specimens will be deposited in a recognized, publicly-accessible herbarium.

(2) A trip leader or other person whose responsibility is to instruct trip participants may collect plants for immediate demonstration, explanation, or keying for full identification. Such collecting should be done inconspicuously (so that persons not with the trip group are not offended or motivated to do likewise) and with reasoned regard for any possible effect on the plant population. However, collecting of rare, threatened, endangered, or sensitive species should never be done for instructional purposes.

2. Rides and Cost-Sharing Policy: Car-pooling and ride-sharing is encouraged on CONPS trips. All drivers who provide rides to others will graciously accept payment from passengers according to the following scale:

1 passenger (in addition to driver)	5 <del>6</del> mile
2 passengers	4
3 "	3
4 "	2

Passengers should pay the driver at the trip's conclusion, without being asked.

3. No pets are permitted on CONPS field trips. Pets trample plants, disturb wildlife, and annoy other trip participants. If pets must be brought along (although this is strongly discouraged), they must remain in or restrained to the owner's vehicle (i.e., walking about on a leash is not acceptable).
4. Field trips are designed primarily for adults, unless the trip description specifically states otherwise. Parents should consider the appropriateness of a given trip to a child. If a child is brought, the parent assumes full responsibility for keeping the child under strict control to prevent his/her damaging or disturbing the flora or fauna, or becoming a burden to the group. No child unaccompanied by a parent is permitted.
5. CONPS's expressed purpose is to promote appreciation and preservation of our flora. Use it lightly. Take care not to damage the very features you have come to see and enjoy. Take photographs, sketches, or other means of recording the plants you see, and do not pick plants or plant parts.

## F I E L D T R I P S

### Grand Valley

Friday to Sunday, June 12, 13, 14

Leaders: Jim Borland and Joann Young

Meet: Friday evening at Colorado National Monument headquarters at 7:30 pm or at the Fruita City Market Saturday morning at 8 am or Sunday morning at 7:30 am.

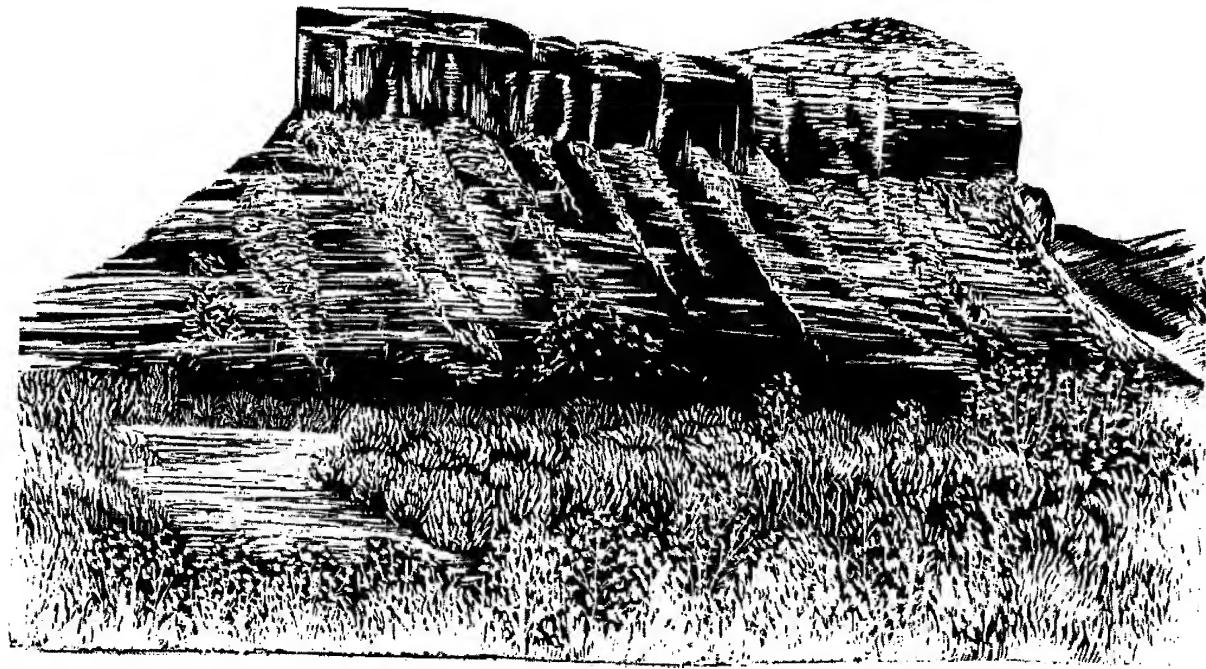
Plans are for a Friday evening lecture beginning at 7:30 pm. Claudia Rector, who works at the Monument, will present a generalized program on the history, birds, and flowers of the Monument. Dr. Robert Young will also present a general geologic picture of the area - Grand Mesa, the Book Cliffs, Grand Valley and the Uncompahgre Plateau. A question and answer period will follow plus finalizing plans for the Saturday and Sunday morning field trips and lectures.

The Saturday field trip will be an ecological profile starting at the Colorado River bottoms and taking the Land's End Road to the top of Grand Mesa. There will be stops along the way for plant, bird, or rock study. We should arrive at the summit about 2 pm.

Weather permitting on Sunday, we will take a desert trail between County Road 13 and 16 over the Loma Hills. This should give a glimpse of interesting desert vegetation. We should be done by 11 am.

Bring a light raincoat in case of inclement weather. Altitude gain on Saturday will be approximately 5500 feet (highest point 10,000 feet), so additional warm clothes may be needed. Insect repellent is a necessity but four-wheel drive vehicles will not be necessary for either day.

For more information and to register contact Nevin BeBee at 733-1038.



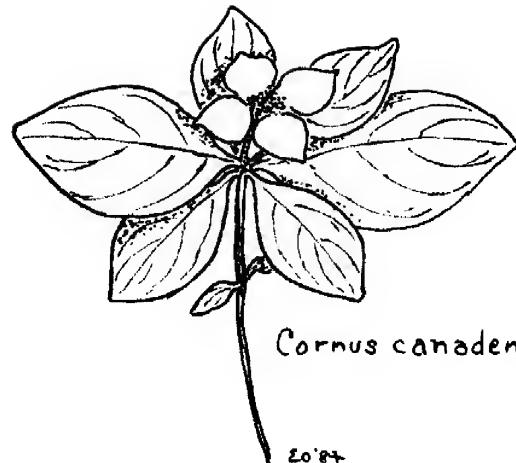
### Florissant

Saturday, June 27

Leader: Mary Edwards

Meet: Call Mary for location

This year's trip to Florissant will be a special occasion. The herbarium of about 700 sheets collected in the National Monument in a plant inventory project by CONPS members has been taken to Florissant where it will be temporarily kept at the Pikes Peak Research Station. We will tour the research station and later visit the National Monument to look for plants needed to complete the inventory. The Monument is an interesting area with a diverse flora. Almost every trip there has added species to the local plant list. Bring lunch, water, and a small digging tool. Be prepared for a day in the sun. For more information, contact Mary Edwards at 233-8133.



*Cornus canadensis*

20' ft



### Northern Rampart Range

Sunday, June 28

Leaders: Dave Powell and Dr. Neal Osborn

Meet: Large parking area at junction of Rampart Range Road and Colorado Highway 67 (about 9-1/2 miles southwest of Sedalia) at 9 am.

The Rampart Range extends from south of Denver to Colorado Springs. It is known for having unusual plant communities (aspen/dwarf blueberry and aspen/beaked hazel, for example), relict plants normally found significantly east of Colorado (beaked hazel, wood lily, black sanicle, wild sarsaparilla, etc.), and plants growing at elevations much lower than normal (bunchberry, dwarf blueberry, western thimbleberry, etc.).

The trip has been scheduled to coincide with optimal blooming period for wood lilies, a rare plant in Colorado.

Bring lunch, water, raingear, and hiking boots (total hiking distance may be a mile or slightly more). High-clearance vehicles (pickups, carryalls, etc.) are recommended although four-wheel drive is not necessary.

For more information and to register, contact Dave Powell at 546-1076.

Holy Cross

Saturday, July 11

Leader: Steve Dougherty

Meet: Parking lot of the Minturn office of the US Forest Service at 9:30 am. To reach Minturn, take the Leadville (Highway 24) exit on I-70.

Limit: 20

The focus of this trip shall be the ecology of upper montane and subalpine wetlands and the environmental factors of distribution within them. Steve will also discuss plant physiology, geology and hydrology as it relates to species in this area.

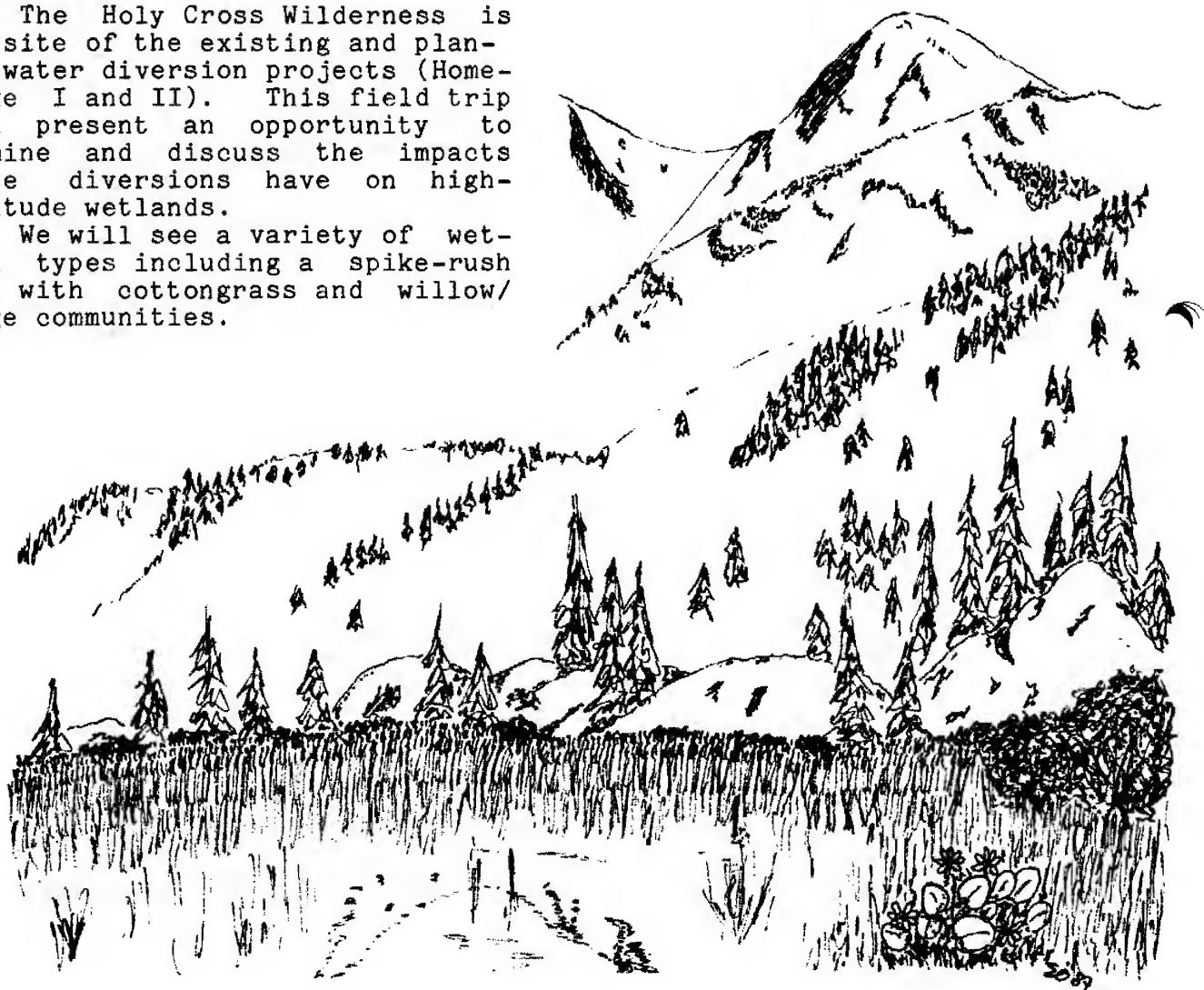
The Holy Cross Wilderness is the site of the existing and planned water diversion projects (Homestake I and II). This field trip will present an opportunity to examine and discuss the impacts these diversions have on high-altitude wetlands.

We will see a variety of wetland types including a spike-rush bog with cottongrass and willow/sedge communities.

Bring lunch, water, raingear, and old sneakers and dry socks. Participants must prepare for wet conditions. Steve might take interested individuals across a shallow stream to examine other wetlands although this is optional.

Hiking distance will be approximately 2-1/2 miles each way with a 600 foot drop to the stream over the last 1/2 mile.

For more information and to register, contact Nevin BeBee at 733-1038.



## North Park and the Park Range

Friday to Sunday, July 17 - 19

Leaders: Dieter Wilken and Sue Galatowitsch

Meet: Friday evening at Grizzly Creek Campground, about 13 miles west of Hebron. Saturday at 9 am (call for location). Sunday at 8 am in Hebron on Highway 14 between Muddy Pass and Walden.

Limit: Saturday - 10

Sunday - 15

This field trip will have a dual purpose. On Saturday, Sue will conduct a trip to sites inhabited by Phacelia formosula (North Park Phacelia) to study population size as part of a long-term monitoring program. Participants will be introduced to this endangered species and the techniques used in the study and will be making a worthy contribution to the study by aiding in field work. The location of the populations will afford an opportunity to become familiar with some of the associated flora.

On Sunday, Dieter will lead a hike to visit populations of Rhododendron in the Park Range. The trip will involve a 6 mile round-trip hike with an elevation gain of about 1000 feet to Lake Katherine at 9800 feet. Rhododendron is relatively abundant at Lake Katherine and there is high probability of good flowering during this weekend. The trail passes through a series of wet meadows and stands of subalpine coniferous forest. A high diversity of species in flower is expected, including several rarely encountered in Colorado.

Camping is available at Grizzly Creek Campground (Routt NF). Participants should bring their own camping equipment as well as food

and water. (Water may or may not be available at the campground.) A daily fee may also be charged at the campground. Come prepared for cold nights, bright sun, and summer thunderstorms. Participants should prepare lunch and bring water for both trips. Bring soft-soled shoes for Saturday, good hiking shoes for Sunday.

Participants must register for Saturday or Sunday or both trips. Car-pooling from the campground will be necessary for both trips.

For more information and to register, contact Sue Galatowitsch at 866-3311 (day) or 532-4635 (evenings).



## THE SEARCH FOR ORCHIDS

It has been about two years since I last reported upon the status of some of the rarer native orchids of Colorado, and there have been some interesting developments in that time.

The rarest orchid in the eleven contiguous western United States apparently is Malaxis monophyllos (M. brachypoda). The orchid is fairly common in Alaska and across Canada, but occurrences in Colorado and California are disjunct over 1000 miles south from the plant's main range. The California Native Plant Society lists it as probably extinct in California, where it was last seen in 1947. The only other western localities are in Colorado. Only one plant was seen near Boulder in 1986.

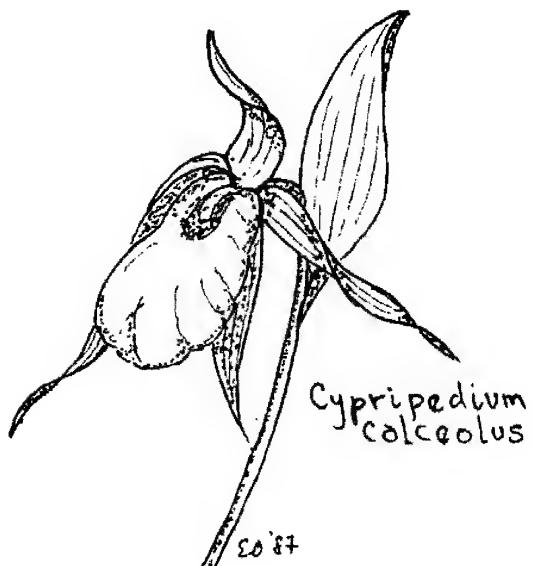
Almost as rare is Spiranthes diluvialis. There are only a few sites in Colorado, Utah, Nevada, and Arizona. New sites were discovered July 30, 1985 and July 24, 1986 in Boulder open space. This Boulder County population is the largest known, with about 5500 plants counted during 1986. An old specimen collected in 1856 by Henry Engelmann (George Engelmann's brother) in Weld County or Morgan County along the South Platte has been identified by Dr. Charles Sheviak as Spiranthes diluvialis. With the previously known Clear Creek sites, there are now 4 known occurrences in Colorado. There is a site along the Green River in Daggett County, Utah, just a few miles west of the Colorado state line. In the recently published Flora of the Uintah Basin, authors Neese and Goodrich erroneously reduce S. diluvialis to synonymy under S. porrifolia, a species of the Sierra Nevada and Cascades. The Green River specimen is cited by Neese and Goodrich, but both Dr. Sheviak and I have seen both spe-

cies and the specimen, and S. diluvialis has nothing to do with S. porrifolia.

Although relatively common as orchids go, Spiranthes romanzoffiana was photographed by Judy Von Ahlefeldt in an unusual situation on July 28, 1984. Her observation was made in the Black Forest region of northern El Paso County, at 7800 feet. This is one of the lowest and earliest observations of this orchid and is certainly the furthest east in Colorado. The orchid is usually confined to the mountains above 8000 feet.

Listera convallariooides is known from 4 sites in Colorado. This very rare orchid was seen at 3 of the 4 sites in 1985-86, but is not very common even at those localities. There are a few populations at scattered localities in Wyoming and Utah and is disjunct in the Santa Catalina Mountains above Tucson, Arizona. The orchid is more common in Canada.

Listera borealis, formerly considered extremely rare in Colorado is now known from 7 sites in 6 counties (Mesa, Garfield, Grand, Clear Creek, Chaffee, and Gunnison [2 sites]). The orchid was collected in the Medicine Bow Mountains of southern Wyoming on June 28, 1986. This was a county record for Albany County and the site forms a bridge between northern



Colorado sites in Grand and Garfield Counties and central Wyoming sites in the Wind River Mountains. The plant seems to have a fairly continuous distribution from northern Canada southward to central Colorado in the coldest and highest mountains.

Epipactis gigantea has a huge range from southern Canada to central Mexico and west of the Great Plains. In Colorado, it is quite rare, with only 5 sites, mostly in the Uncompahgre Plateau. A specimen collected by T. S. Brandegee in 1875 in the San Juan River Valley was seen at the Jepson Herbarium at the University of California, Berkeley. Although attributed to Colorado by the collector, it could be from anywhere in the "four corners" area. The Poncha Springs (Chaffee County) population first visited in the 19th century is still in existence. Plants were seen and photographed July 5, 1986. This is the only eastern slope population in Colorado, but there does not seem to be any reason why it should be so restricted. There are populations in the Rio Grande Valley in north-central New Mexico and in the Canadian River Valley in northeastern New Mexico, plus populations in Oklahoma and Texas.

The bog-orchid Platanthera sparsiflora (Habenaria sparsiflora, Limnorchis sparsiflora) was collected in 1972 in Routt County by Dr. Jack Carter and the specimen was seen at Colorado College. This orchid is now known from Routt, Eagle, Pitkin, Mesa, Montrose, San Miguel, and Saguache Counties. Plants previously identified as Habenaria sparsiflora in southeastern Utah have been given the new name Habenaria zothecina by Dr. Stan Welsh of BYU. The photo of H. sparsiflora in John Long's "Native Orchids of Colorado" was taken at Arches National Park and illustrates H. zothecina. A specimen from the same spot where Dr. Long obtained his picture is cited by Welsh. Flowers of Habenaria zothecina seem to have much longer spurs

that sort of hang down and hug the plant stem, while typical Habenaria sparsiflora (Platanthera sparsiflora) flowers have the spur sticking rigidly out the back, rather perpendicular to the stem. It seems possible that H. zothecina may be a disjunct population of the more southern Platanthera limosa (Habenaria limosa).

Pat Pachuta of the Denver Botanic Gardens collected Piperia unalaschensis in Grand and Eagle Counties in 1986. Both are county records. This orchid is now known from 11 counties, including Dolores County in southwestern Colorado. It may possibly be in New Mexico. Taxonomy of the genus Piperia, of which P. unalaschensis is the only species in Colorado, was revised by J. D. Acherman and published in the Botanical Journal of the Linnean Society, v. 75, pp. 245-270 (1977).

Yellow ladies' slipper (Cypripedium calceolus) was found at a new locality in Las Animas County, June 17, 1985. Over 40 plants were seen. The plants were seen in bud a year later on June 8, 1986.

Corallorrhiza striata was observed and photographed in Montezuma County on June 15, 1985, but only two plants were found and no specimen was taken. The relatively few sites are widely scattered in the mountains of Colorado.

Persons interested in rare plants are advised to obtain a copy of the Native Plant Society's guidelines for collection of plant specimens, the Colorado Natural Areas Program's list of plant species of special concern, and to thoroughly know the rare plants before attempting to make herbarium specimens. Any collections cited above have been placed or were seen at the Colorado College, Denver Botanic Gardens, University of Colorado, Colorado State University, or University of Wyoming (Rocky Mountain) herbaria.

Bill Jennings.

## FRONT RANGE SEED ANALYSTS

Front Range Seed Analysts (FRSA) is a newly formed organization comprised of Seed Analysts. The need for this organization became evident as more Seed Analysts began working the intermountain and high plains areas of the west.

Many native species have never been included in the Association of Official Seed Analysts (AOSA) Rules for Testing Seed. These species are increasingly finding their way into commerce. Other species, commonly grown in this area, require special handling and testing procedures. Thus, the seed industry of the intermountain and high plains is very unique.

The purpose of FRSA is to inform, educate and support the area seed community. Current and new developments in seed testing will be disseminated by quarterly

newsletters and periodic seminars. Members of the FRSA, in cooperation with researchers at Colorado State University, the Colorado Seed Laboratory, the National Seed Storage Laboratory, and area seed companies, will actively present the special needs of the intermountain and high plains seed community before AOSA.

FRSA invites Aquilegia readers to attend a Summer Seed Symposium on July 17, 1987 at Colorado State University. Speakers from seed companies and seed laboratories in the Front Range area will present topics including seed law problems, germplasm preservation, seed identification, and seed testing techniques (electrophoresis and tetrazolium tests). For registration information contact Symposium Chairman, Bill Ebener, Colorado Seed Laboratory, E10 Plant Science Bldg., Colorado State University, Fort Collins, CO 80523, 491-6406.

---

### Ecology of Wetlands Workshop

On February 7, Steve Dougherty presented a workshop on the Ecology of Wetlands in the Colorado montane region. Emphasis was on the wetlands of the Holy Cross Wilderness which are threatened with partial drainage by the Homestake II water diversion project.

Wetlands are areas inundated or saturated with water for part of the year. Mountain wetlands in Colorado depend on snowmelt for their existence and are relatively nutrient rich. True bogs, which depend on rainfall or snowmelt and are nutrient poor, probably don't exist in Colorado.

Steve described the various geological, hydrological, and topographical factors which determine

the locations of plant communities in wetlands. The duration of spring flooding and depth of the water table are important factors influencing wetland plants.

Wetlands plants grow in anaerobic conditions much of the time. Various physiological adaptations, such as anaerobic metabolism ending at malic acid rather than toxic ethanol, were discussed.

Wetlands are vital components of many ecosystems. Steve described many of their functions such as groundwater recharge, shoreline anchoring, and food chain support. Wetlands mitigation to preserve wetland values was also discussed.

Steve's program certainly increased my understanding of the functioning of wetlands. I believe a future field trip to a wetland would be very educational.

Rick Brune

## COLORADO PESTICIDE NETWORK

Spring is here and with it comes the predictable onslaught of pesticides in the environment, our city and county parks and other public lands as well as lawns and diseased trees.

An advertisement for the pesticide Tordon recently came in the mail: "Tordon kills the meanest weeds in the west", it said. And their list of these "meanest weeds" included leafy spurge, Canada thistle, diffuse knapweed, lupine, snakeweed, fringed sagebrush, locoweeds, yellow toadflax, yellow starthistle, dalmatian toadflax, absinth wormwood, lambert crazyweed, plains prickly pear, field bindweed, low or plains larkspur, rabbitbrush, death camas, and musk thistle.

As sales and use of these pesticides increase so also do their unstudied side effects. What impact will Tordon or other weed killers have on Colorado's native

plants or soil biota?

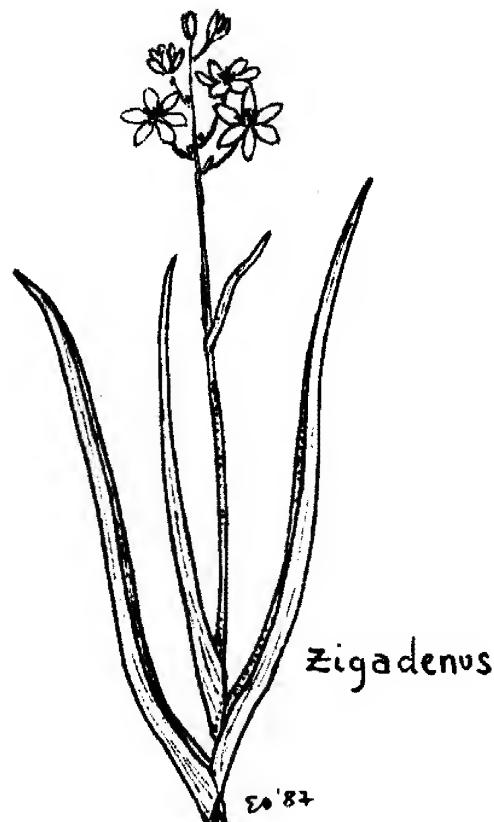
We at the Colorado Pesticide Network are just beginning to look at the many uses of pesticides in Colorado. We welcome people to the network who are interested in the pesticide issue. And we welcome those who are interested and knowledgeable about native plants and the impact of pesticides on them. Knowledge concerning non-chemical control of noxious weeds is also needed.

To subscribe to the bimonthly newsletter, send a donation (\$5 is average) to Colorado Pesticide Network, c/o Colorado Environmental Coalition, 2239 E. Colfax, Denver, CO 80206-1390. To volunteer expertise, please contact Elizabeth Otto at 393-0466 or Angela Medbery at 433-2608

### INFORMATION NEEDED

This spring the Jefferson County Nature Association (JCNA) will begin compiling and updating plant species lists for park and open space areas in Jefferson County. If you have information on species occurrence or know of previously compiled lists, please contact Sally White at 697-5439 (evenings). We already have a 1981 species list for Lookout Mountain Conference and Nature Center compiled by Mary Edwards.

The Jefferson County Nature Association, a non-profit organization, was established to explore natural areas in Jefferson County, to educate others of their importance, and to conserve and preserve habitat for wildlife and plant species indigenous to the county. JCNA will be conducting field trips to obtain inventory data pertinent to these purposes. Contact Sally White for more information.



**OFFICERS**

President	Eleanor Von Bargen	756-1400
Vice-President	Steve O'Kane	477-0183
Secretary	Meg Van Ness	279-2569
Treasurer	Myrna P. Steinkamp	226-3371

**BOARD OF DIRECTORS**

Jim Borland (88)	Denver	329-9198
Carol Brandt (87)	Ft. Collins	484-9251
Virginia Crosby (87)	Lafayette	666-5303
Miriam Denham (87)	Boulder	442-1020
Mark Galatowitsch (88)	Berthoud	532-2638
Elizabeth Otto (88)	Idaho Springs	567-2381
Velma Richards (88)	Englewood	524-5832
Les Shader (87)	Ft. Collins	484-0107
Eleanor Von Bargen (87)	Denver	756-1400

**Chapter Presidents (Members of Board)**

Boulder	Virginia Crosby	666-5303
Denver Metro	Peter Root	433-9340
Ft. Collins	Carol Brandt	484-9251

**COMMITTEES**

Conservation	Sue Martin	226-3371
Editorial	Peter Root	433-9340
Education	Miriam Denham	442-1020
Field Trips	Nevin BeBee	733-1038
Florissant	Mary Edwards	233-8133
Horticulture & Rehabilitation	Gayle Weinstein	333-3024
Membership	Myrna Steinkamp	226-3371
Publicity	-----	
Workshops	Bill Jennings	494-5159

**SCHEDULE OF MEMBERSHIP FEES**

Life	\$250.00	Family or Dual	\$12.00
Supporting	50.00	Individual	8.00
Organization	25.00	Student or Senior	4.00

**NEWSLETTER CONTRIBUTIONS**

Please direct all contributions to the newsletter to  
Peter Root  
4915 West 31st Avenue  
Denver, CO 80212

Deadlines for newsletter materials are February 15, April 15, June 15, August 15, October 15 and December 15.

There is a special need for short items such as some unusual information about a plant, a little known botanical term, etc. Please include author's name and address, but items will be printed anonymously if requested.

**MEMBERSHIP RENEWALS AND INFORMATION**

Please direct all membership applications, renewals and address changes to the **MEMBERSHIP** chairperson, in care of the Society's mailing address.

Please direct all other inquiries regarding the Society to the **SECRETARY** in care of the Society's mailing address.

Colorado Native Plant Society  
P.O. Box 200  
Fort Collins, Colorado 80522

Time Value Material - Mailed on or about May 15

Non-profit  
Organization  
U.S. Postage  
PAID  
Permit #1475  
Denver, Colorado

DR. DEXTER W. HESS  
2202 SANTA FE AVE.  
LA JUNTA CO 81050

# COLORADO NATIVE PLANT SOCIETY

## FORT COLLINS CHAPTER

One of our main goals for this summer is to compile a plant list of the species at the pinyon grove in Owl Canyon. This area is listed as a State Natural Area and contains prehistoric archeological sites. I hope that you can join us for one (or all!) of our monthly fieldtrips to Owl Canyon.

MAY 3 SUNDAY 2:00 PM	Owl Canyon State Natural Area pinyon grove fieldtrip for compiling a floral inventory of this unique area.
MAY 13 WEDNESDAY 7:30 PM ***MONTHLY MEETING***	LANDSCAPING WITH NATIVE PLANTS. A program by Herb Schaal from Edaw Inc. on using native perennials which are well adapted to this climate. Room E112, Plant Sciences Bldg. at CSU.
MAY 23 SATURDAY 9:00 AM	Spring Wildflowers of the Foothills and Potluck Picnic at Patricia Grant's house NW of Fort Collins, 515 W County Road 72. Please bring your own dishes, beverage, and a covered dish. (See note below concerning directions.)
JUNE 7 SUNDAY 2:00 PM	Owl Canyon State Natural Area pinyon grove fieldtrip.
JULY 8 WEDNESDAY 4:00 PM	Owl Canyon State Natural Area pinyon grove fieldtrip.
JULY 18 SATURDAY	<u>Phacelia formosula</u> fieldtrip where we will help conduct a census of this rare plant found near Walden, CO. Limit: 8 people. Call Sue Galatowitsch to reserve your place on the trip, 866-3311 (during the workday only).
AUGUST 8 THURSDAY 4:00 PM	Owl Canyon State Natural Area pinyon grove fieldtrip.

For all of the fieldtrips (and picnic) we will meet at the times noted above at the Safeway Parking lot on the corner of Mulberry and College. There we will receive directions and carpool to the fieldtrip site.

For all of the fieldtrips please remember to wear over-the-ankle boots, bring sun protection, water, and a sack lunch/dinner.

FOR MORE INFORMATION CALL: BETSY NEELY 224-4193  
DEREK MARCHI 224-3324

\*\*\*\*\*  
\*  
\* BOULDER CHAPTER - FIELD TRIPS  
\*  
\* COLORADO NATIVE PLANT SOCIETY  
\*  
\*\*\*\*\*

June 9, Tuesday, 6:00 PM - TABLE MOUNTAIN, NORTH BOULDER

Easy hike to explore the plants on Table Mountain. Go north on Colorado 36 to Greenbriar Restaurant, take a right, go 1 mile and wait there at the gate. Trip Leaders are Virginia Crosby and Freeman Hall. For more information call Ginny at 236-6533 (day) or 666-5303 (eve).

JUNE 27, SATURDAY, 9:00 AM-2:00 PM - WHITE ROCKS NATURAL AREA, BOULDER

Come see the rare and common plants of the White Rocks Natural Area adjacent to Boulder Creek. The purpose of this hike is to identify plants in the area for the City of Boulder. This trip is limited by permit to 12 people and RESERVATIONS ARE REQUIRED. To reserve a space call trip leader, Bill Jennings at 494-5159.

JULY 12, SUNDAY, 9:00 AM-2:00 PM - ARAPAHOE PASS TRAIL

Come explore the Arapahoe Pass Trail and learn the mountain wildflowers. Novice and experts are welcome to share in identifying. Walk will cover an easy 3 mile hike with some elevation gain. Call trip leader, Barbara Doe at 443-8938 for more information.

\* \* \* \* \*

DENVER CHAPTER PROJECT

The Denver Chapter will be doing a plant inventory project at Castlewood Canyon State Park near Franktown. This unusual canyon in sandstone at the northern edge of the Black Forest may have a very interesting flora. For more information, contact Ron Abbott at 333-6151.

The Rare Native Plants of Colorado

Scientific name	Common name
<u>Forests</u>	
<i>Aralia racemosa</i>	American spikenard
● <i>Dryopteris expansa</i>	Spreading woodfern
<i>Lilium philadelphicum</i>	Wood lily
<i>Listera convallarioides</i>	Broadleaf twayblade
<i>Malaxis brachypoda</i>	Addersmouth orchid
<i>Mimulus gemmiparus</i>	Weber monkey flower
<i>Rhododendron albiflorus</i>	White-flowered azalea
<i>Senecio dimorphophyllus</i> var. <i>intermedius</i>	Twoleaf groundsel
● <i>Trillium ovatum</i>	Western trillium <i>(July (Rout))</i>
<u>Woodland</u>	
<i>Astragalus humillimus</i>	Mancos milkvetch
<i>Astragalus inifolius</i>	Grand Junction milkvetch
<i>Astragalus schmolliae</i>	Schmoll's milkvetch
<i>Echinocereus triglochidiatus</i> var. <i>inermis</i>	Spineless hedgehog cactus
<i>Eriogonum brandegei</i>	Brandegee wild-buckwheat
● <i>Frasera coloradoensis</i>	Colorado Gentian <i>JUNE, JULY (LASANIMAS, BACA, PRÖWERS)</i>
<i>Gilia stenothysa</i>	Narrowstem gilia
<i>Herrickia horrida</i>	Horrid herrickia
<i>Lupinus crassus</i>	Payson's lupine
● <i>Lygodesmia colorresens</i>	Olores skeletonplant <i>JUNE (MESA)</i>
<i>Mirabilis rotundifolia</i>	Round leaf four o'clock
<i>Pediocactus knowltonii</i>	Knowlton's cactus
● <i>Penstemon degeneri</i>	Degener beardtongue <i>JULY (FREMONT, CUSTER)</i>
<u>Shrubland</u>	
<i>Astragalus cronequistii</i>	Cronquist's milkvetch
<i>Astragalus microcymbus</i>	Skiff milkvetch
<i>Astragalus osterhoutii</i>	Osterhout's milkvetch
<i>Conimitella williamsii</i>	Williams conimitella
● <i>Eriogonum pinnophyllum</i>	Clay-loving wild-buckwheat <i>May (MONTROSE)</i>
<i>Eriogonum clivellatum</i>	Comb-wash wild-buckwheat
<i>Hackelia gracilenta</i>	Stickseed
<i>Ipomopsis polyantha</i> var. <i>polyantha</i>	Many-flowered gilia
<i>Lesquerella pruinosa</i>	Pagosa bladderpod
<i>Lomatium nudicaule</i>	Colorado desert-parsley
<i>Lomatium latilobum</i>	Broad-leaf desert parsley
● <i>Mentzelia densa</i>	Royal Gorge stickleaf <i>JULY, AUGUST (FREMONT, CHAFFEE)</i>
● <i>Neoparrya megarrhiza</i>	Bigroot neoparrya <i>JUNE (WELD, GRAND)</i>
● <i>Penstemon granitii</i>	Graham's beardtongue <i>MAY (RIOBLANCO)</i>
● <i>Penstemon harringtonii</i>	Harrington's beardtongue <i>JUNE (GRAND, EAGLE, GARF, ROUT)</i>
● <i>Penstemon parviflorus</i>	Small-flowered beardtongue
● <i>Penstemon retrorsus</i>	Adobe beardtongue <i>MAY (DELTA, MONTROSE)</i>
<i>Sclerocactus glaucus</i>	Uinta Basin hookless cactus
<u>Grassland</u>	
● <i>Ambrosia linearis</i>	EL PASO KIOWA Streaked ragweed <i>AUGUST (ELBERT)</i>
<i>Astragalus ripleyi</i>	Ripley's milkvetch
<i>Cryptantha acuta</i>	Grand Junction cats-eye
<i>Eustoma graniflorum</i>	Showy prairie gentian
● <i>Gaura neomexicana</i> ssp. <i>coloradensis</i>	Colorado butterfly weed <i>JULY, AUGUST (WELD)</i>
<i>Hypoxis hirsuta</i>	Eastern yellow stargrass
● <i>Parthenium alpinum</i>	Alpine feverfew <i>MAY (WELD)</i>

The Rare Native Plants of Colorado

Scientific name	Common name
<u>Forests</u>	
<i>Aralia racemosa</i>	American spikenard
● <i>Dryopteris expansa</i>	Spreading woodfern
<i>Lilium philadelphicum</i>	Wood lily
<i>Listera convallarioides</i>	Broadleaf twayblade
<i>Malaxis brachypoda</i>	Addersmouth orchid
<i>Mimulus gemmiparus</i>	Weber monkey flower
<i>Rhododendron albiflorus</i>	White-flowered azalea
<i>Senecio dimorphophyllus</i> var. <i>intermedius</i>	Twoleaf groundsel
● <i>Trillium ovatum</i>	Western trillium <i>(July (Rout))</i>
<u>Woodland</u>	
<i>Astragalus humilis</i>	Mancos milkvetch
<i>Astragalus tintillans</i>	Grand Junction milkvetch
<i>Astragalus schmolliae</i>	Schmoll's milkvetch
<i>Echinocereus triglochidiatus</i> var. <i>inermis</i>	Spineless hedgehog cactus
<i>Eriogonum brandegei</i>	Brandegee wild-buckwheat
● <i>Frasera coloradoensis</i>	Colorado Gentian <i>June, July (LASANIMAS, BACA, POWERS)</i>
<i>Gilia stenothysa</i>	Narrowstem gilia
<i>Herrickia horrida</i>	Horrid herrickia
<i>Lupinus crassus</i>	Payson's lupine
● <i>Lygodesmia coloradoensis</i>	Olores skeletonplant <i>JUNE (MESA)</i>
<i>Mirabilis rotundifolia</i>	Round leaf four o'clock
<i>Pediocactus knowltonii</i>	Knowlton's cactus
● <i>Penstemon degeneri</i>	Degener beardtongue <i>JULY (FREMONT, CUSTER)</i>
<u>Shrubland</u>	
<i>Astragalus cruentus</i>	Cronquist's milkvetch
<i>Astragalus microcymbus</i>	Skiff milkvetch
<i>Astragalus osterhoutii</i>	Osterhout's milkvetch
<i>Conimitella williamsii</i>	Williams conimitella
● <i>Eriogonum peltinophyllum</i>	Clay-loving wild-buckwheat <i>May (MONTROSE)</i>
<i>Eriogonum clavellatum</i>	Comb-wash wild-buckwheat
<i>Hackelia gracilenta</i>	Stickseed
<i>Ipomoea polyantha</i> var. <i>polyantha</i>	Many-flowered gilia
<i>Lesquerella pruinosa</i>	Pagosa bladderpod
<i>Lomatium concinnum</i>	Colorado desert-parsley
<i>Lomatium latilobum</i>	Broad-leaf desert parsley
● <i>Mentzelia densa</i>	Royal Gorge stickleaf <i>JULY, AUGUST (FREMONT, CHAFFEE)</i>
● <i>Neoparrya megarrhiza</i>	Bigroot neoparrya <i>JUNE (WELD, GRAND)</i>
● <i>Penstemon graminifolius</i>	Graham's beardtongue <i>MAY (RIOBLANCO)</i>
● <i>Penstemon harringtonii</i>	Harrington's beardtongue <i>JUNE (GRAND, EAGLE, GARF, ROUT)</i>
● <i>Penstemon parviflorus</i>	Small-flowered beardtongue
● <i>Penstemon retrorsus</i>	Adobe beardtongue <i>MAY (DELTA, MONTROSE)</i>
<i>Sclerocactus glaucus</i>	Uinta Basin hookless cactus
<u>Grassland</u>	
● <i>Ambrosia linearis</i>	Streaked ragweed <i>AUGUST (ELBERT)</i>
<i>Astragalus ripleyi</i>	Ripley's milkvetch
<i>Cryptantha aberta</i>	Grand Junction cats-eye
<i>Eustoma granatiflorum</i>	Showy prairie gentian
● <i>Gaura neomexicana</i> ssp. <i>coloradensis</i>	Colorado butterfly weed <i>JULY, AUGUST (WELD)</i>
<i>Hypoxis hirsuta</i>	Eastern yellow stargrass
● <i>Parthenium alpinum</i>	Alpine feverfew <i>MAY (WELD)</i>
<i>EL PASO KIOWA ELBERT</i>	